



## Climate Change Working Group

### *Meeting Minutes*

**Date:** 07/08/11

**Start Time:** 10:05 a.m.

**End Time:** 11:40 a.m.

**Meeting Method:** Conference call with presentation sharing (Go-To-Meeting)

**Participation:** Eric Kingma (Chair), Fiona Langenberger, Scott Kiefer, Keeaumoku Kapu, Bill Friedl, Marnie Meyer, Paul Wong, Jonathan Martinez, Micki Ream, Joe Paulin, Jean Souza, Nadilyn Ignacio

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#### **I. Introductions**

- Eric Kingma - Western Pacific Regional Fishery Management Council, Sanctuary Advisory Council, Chair of the Climate Change Working Group
- Keeaumoku Kapu - Kuleana Kuikahi, Lahaina
- Scott Kiefer - Center for Island Climate Adaptation and Policy
- Marnie Meyer – State of Hawaii Office of Planning
- Bill Friedl - BDI Maritime, Former Chair of the Sanctuary Advisory Council
- Paul Wong - Operations Coordinator, HIHWNMS
- Joseph Paulin - Advisory Council Coordinator, HIHWNMS
- Jonathan Martinez - Science Coordinator, Pacific Islands Region ONMS
- Micki Ream - Education Liaison, HIHWNMS
- Nadilyn Ignacio - Intern, HIHWNMS
- Jean Souza - Kauai Programs Coordinator, HIHWNMS
- Fiona Langenberger - Oahu Programs Assistant, HIHWNMS

#### **II. Sanctuary Sentinel Site presentation**

- Paul Wong presented on the Office of National Marine Sanctuaries' Sentinel Site initiative.
- The presentation is also available for working group members on the Google site, under "Sanctuary Resources"
- Sentinel: one that keeps guard, looks for intruders, prevents trespassing
- ONMS Sentinel Monitoring Program: Ocean Observing Sites for Ecosystem Integrity and Early Warning of Change
- Sentinel Sites are intensely studied and monitored areas within marine sanctuaries; sentinel monitoring informs management by increasing understanding of ecosystems and

by providing early warnings of ecosystem change. A sentinel program attracts and advances sanctuary science

- Fully-functioning sentinel program includes: Observe & Monitor, Applied Research, Models & Predictions, Spatial Analysis & Visualization, Information Transfer, Education & Outreach, Management & Decision Making (all aspects of science, service and stewardship)
- Example of Sentinel Site Issues: Noise, Climate Change, Contaminants, Production, Maritime Heritage Preservation, Biogenic Habitat, Biodiversity, Invasive Species, Keystone and Focal Species
- Various examples from other sites are presented
- The sanctuary system can serve as a part of sentinel networks
- General Criteria for Selecting Sentinel Sites may include ecological significance, practicality and resource leveraging, relevance
- Existing Capabilities: Place-based, long-term research and monitoring; on-site staff and facilities; research coordination and expertise, vessels and instruments, permitting
- Initial Investments: Repackaging, marketing, personnel time
- One question regarding sentinel sites was if the Hawaiian Islands Humpback Whale National Marine Sanctuary is a or has any sentinel sites // Answer: The Sentinel Program is a more recent initiative – so far the sanctuary (HIHWNMS) has not established the program yet. Although data on ship strikes and entanglements are recorded and monitored
- Q: Would the entire sanctuary be designated as a sentinel site, or just specific locations within the sanctuary? // A: Could be just specific areas, does not necessarily have to be the entire sanctuary. Might also make sense to monitor specific things in certain areas.
- Q: How much funding is allocated towards this initiative, if any? // A: The initiative is getting recognition, also from higher levels (NOS), however no specific budget was allocated yet

### **III. Review of Technical Advisory Information**

- The questions that were answered by Dr. Jeff Polovina are available on the Google site
- No information about acidification received yet
- Presentation about sea level rise (presented by Dr. Chip Fletcher on July 7) predicts sea level to rise up to 3 feet in the next 100 years. Marnie will send presentation to working group members for their review.
- Group needs more information about how sea level rise would impact native Hawaiian fishponds.
- Eric will try to get in touch with group of fishpond practitioners (through Walter Ritte)
- Fishponds might be impacted, needs to be figured out how to include in recommendations
- There are plans underway to organize a workshop specifically focusing on fishponds – they might be able to bring knowledge to the Climate Change working group
- Needs to be specified which fishponds are fully operational (GIS layer that maps fishponds might not represent that)



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- Any other technical information needed? – Invasive Species/Algae would be another component of interest. How do they impact the ecosystem in terms of Climate Change; ecosystem resiliency.

#### **IV. ORMP Climate Change updates**

- The Office of Planning's Coastal Zone Management (CZM) Program coordinates Ocean Resource Management Plan (ORMP)
- The ORMP Working Group had a meeting yesterday focused solely on climate change. The Lieutenant Governor made opening remarks at the meeting, as he is very supportive of the climate change adaption planning process OP/CZM and the ORMP Group is taking
- The Office of Planning is coordinating a statewide climate change policy, to be included as a Priority Guideline in Part III of the Hawaii State Planning Act (Chapter 226, HRS) – this would be a foundation to integrate Climate Change in future policies
- The policy will be presented to the Lieutenant Governor by the end of September, for inclusion into the Administration's legislative package for the 2012 session.
- Who would be implementing these guidelines? – State & County agencies – The State Planning Act serves as a guide for future long-range development of the State, identifying the goals, objectives, policies and priorities for the State. It establishes a system for plan formulation and program coordination to provide for an integration of all major state and county activities. The Working Groups consists of various stakeholders, including state and county agencies, , UH partners, federal partners, and our citizens advisory group.
- The draft policy will be send out for review to interested constituents – not clear yet if there will be a public comment period due to the short timeline
- The draft will be developed by OP/Coastal Zone Management Program in coordination with ORMP members and other relevant stakeholders

#### **V. The relationship of traditional ecological knowledge to changing conditions**

- Changing conditions such as trade winds that increase in speed (according to Dr. Fletcher's presentation), ocean circulation -> how affects traditional ecological knowledge – or better, environmental knowledge and how to adopt to changing conditions
- Example of navigators (canoes traveling to/from Tahiti for instance)

#### **VI. Review of Google Docs site and working group information**

- Marnie, Bill, Scott and Keeaumoku need access
- Use Google docs, especially for drafting recommendations
- Home: includes calendar
- Background: Public comments, work plan, MPR one pager
- Members: list of members
- Meetings: Dates, Agenda and Minutes



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- Working Documents: Currently lists technical experts
- Sanctuary resources: today's presentation, other presentations
- Other references: Papers that contain information related to Climate Change and Humpback Whale/ Ecosystem

#### **VII. Developing Recommendations**

- Which initiatives could sanctuary take on - Working Group members can develop draft that will be shared with the entire group and also be presented to technical experts for their feedback later on
  - Marnie: Climate Change Policy, synergy between ORMP initiative and sanctuary's efforts
  - Jon: Prepare synthesis of literature related to Hawaii – this section could be used as the introduction for recommendations (current observations of Climate Change and their potential impacts -> leads to recommendations)
  - Paul: Existing Sanctuary programs (Climate Smart, Sentinel Sites)
  - Scott, Keeaumoku: General areas of how environmental knowledge would need to be considered and included
  - Eric: Overarching Climate Change Issues, topics associated with sea surface temperature, acidification, monitoring

- No public comments -

**Next meeting:** 08/18/11 at 10:00AM